



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/749,294	12/30/2003	Yang Feng	MWS-091	9844
74321	7590	03/11/2008	EXAMINER	
LAHIVE & COCKFIELD, LLP/THE MATHWORKS One Post Office Square Boston, MA 02109-2127			KENDALL, CHUCK O	
ART UNIT	PAPER NUMBER			
	2192			
MAIL DATE	DELIVERY MODE			
03/11/2008	PAPER			

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/749,294	FENG ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	CHUCK O. KENDALL	2192	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 30 December 2003.
- 2a) This action is **FINAL**.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-106 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-106 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 30 December 2003 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ .                                    |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ .  | 6) <input type="checkbox"/> Other: _____ .                        |

**Detailed Action**

1. This is in response to Application filed 12/30/03.
2. Claims 1 – 106 have been examined.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1 – 76, 78 – 79, 84, 87 - 89, 91, 97, 99 – 102, and 104 – 106 are rejected under 35 U.S.C. 102(e) as being anticipated by Russell et al. US 5623604 A

Regarding claims 1, 18, 35, 52, and 100, in an electronic device, a method for management of software, comprising the steps of:

determining a functionality of a unit of code and an environment configuration suitable for executing said unit of code (26:44-50); and  
automatically providing a file name corresponding to said functionality for said unit of code (34:5 -11).

Regarding claims 2, 19, 36, 53, and 101, the method of claim 1, the method further comprising the step of locating a file having said file name in a directory corresponding to said environment configuration (34:10 – 25).

Regarding claims 3, 20, 37, and 102, the method of claim 2, the method further comprising the step of naming said directory to have a directory name corresponding to said environment configuration (34:10 – 25).

Regarding claims 4, 21, 38, 55, and 104, the method of claim 2, wherein a plurality of characteristics of said environment configuration include at least one of the group of a word size on a target processor, a word size on a host processor, an execution software type, an execution software version number and an operating system (30:1 – 10, see operating system).

Regarding claims 5, 22, 39, and 56, the method of claim 3, wherein said naming step determines said directory name by the use of a checksum of a plurality of characteristics of said environment configuration (23:20 – 29, see checksum).

Regarding claims 6, 23, 40, and 57, the method of claim 3, wherein said characteristics of said environment configuration include at least one of the group of a word size on a target processor, a word size on a host processor, an execution software type, an execution software version number and an operating system (30:1 – 10, see operating system).

Regarding claims 7, 24, 41, and 58, the method-method of claim 1, wherein said file name is determined by the use of a checksum of characteristics of said functionality (23:20 – 29, see checksum).

Regarding claims 8, 25, 42, and 59, the method of claim 1, wherein said checksum is based on at least one of the group of a MD5 checksum and a CRC checksum (36:45 – 50, see table 4, shows CRC).

Regarding claims 9, 26, 43, and 60 the method of claim 7, wherein said characteristics of said functionality include at least one of the group of an input type and an output type of said unit of code, an operation on an input to said unit of code (4:63-67).

Regarding claims 10, 27, 44, and 61, the method of claim 1, wherein said step of automatically providing a file name provides said file name also corresponding to said environment configuration (34:10 – 25).

Regarding claims 11, 28, 45, and 62 the method of claim 1, wherein said step of automatically providing a file name determines said file name by the use of a checksum of a plurality of characteristics of said functionality and said environment configuration (23:20 – 29, see checksum).

Regarding claims 12, 29, 46, and 63, the method of claim 1, wherein said step of automatically providing a file name determines said file name by the use of a consistent naming scheme representative of characteristics of said functionality (34:10 – 25).

Regarding claims 13, 30, 47, and 64, the method of claim 1, wherein said file name is comprised of characters pertaining to an input type and an output type of said unit of code (4:63-67).

Regarding claims 14, 31, 48, and 65, the method of claim 1, wherein said file name is comprised of characters pertaining to said functionality of said unit of code (34:10 – 25).

Regarding claims 15, 32, 49, and 66, the method of claim 1, wherein said file name also corresponds to said environment configuration (34:5 – 25).

Regarding claims 16, 33, 50, 67, 78, 91 and 105 the method of claim 1, wherein said unit of code is representative of a portion of block diagram environment (19:54 – 60).

Regarding claims 17, 34, 51, 68, 79, 92, and 106 the method of claim 1, wherein said unit of code is representative of a portion of a modeling environment (21:45 – 50, see construct).

Regarding claim 69, Russell in an electronic device, a method for management of software, comprising the steps of:

providing an organizational structure having a plurality of constituents, said constituents corresponding to unique environment configurations (15:52 – 58, see structure); and

providing an identifier corresponding to a functionality of a unit of code in said organizational structure (34:10 – 25).

Regarding claim 70, the method of claim 69, the method further comprising the step of locating said unit of code having said identifier in a constituent, of said plurality of constituents corresponding to said environment configuration (34:10 – 25).

Regarding claim 71, the method of claim 70, the method further comprising the step of naming said constituent to have a constituent name corresponding to said environment configuration (34:10 – 25).

Regarding claim 72, the method of claim 71, wherein said naming step determines said constituent name by the use of a checksum of a plurality of characteristics of said environment configuration (23:20 – 29, see checksum).

Regarding claims 73, 84 and 97 the method of claim 69, wherein said organizational structure is a directory structure and said identifier is a file name (34:10 – 25).

Regarding claims 74 and 87, in an electronic device, a method for management of software, comprising the steps of:

selecting a utility to process having a first functionality (21:45 – 50, see utility);  
determining a characteristic of a first environment configuration suitable for operation of said utility (21:45 – 50, see utility);  
searching an organizational structure for a constituent corresponding to said first environment configuration (15:52 – 58, see structure);  
creating said constituent corresponding to said first environment configuration, if said constituent corresponding to said first environment configuration is not found in said searching an organizational structure step (37:45 – 55);  
generate a name for said first functionality (34:10 – 25);

searching said constituent corresponding to said first environment configuration for an identifier of a unit of code, said identifier corresponding to said name for said first functionality (34:10 – 25); and create said unit of code having said first functionality and suitable for execution in said first environment configuration, if said identifier is not found in said searching said constituent corresponding to said first environment configuration step characteristics of said first environment configuration(34:5 – 25).

Regarding claims 75 and 88, the method of claim 74, wherein said searching an organizational structure step uses a checksum of a plurality of characteristics of said first environment configuration (23:20 – 29, see checksum).

Regarding claims 76 and 89, the method of claim 74, wherein said step of searching a constituent corresponding to said first environment configuration uses a checksum of a plurality of characteristics of said first functionality (23:20 – 29, see checksum).

#### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 77, 80 – 83, 85, 86, 90, 93 – 96, 98 and 103 are rejected under 35 U.S.C. 103(a) as being unpatentable over Russell et al. US 5623604 A in view of Fuller et al. 6,807,631.

Regarding claims 77 and 90 Russell discloses all the claimed limitations as applied in claim 76 above. Russell doesn't expressly disclose, comprising the steps of: generating a comment string corresponding to said first functionality of said unit of code and verifying said functionality of said unit of code by the use of said checksum and said comment string.

However, Fuller in an analogous art and similar configuration discloses that the hardware configuration encompasses various types of configuration information including user defined comments (9:17 – 27). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Russell and Fuller because it would enable incorporating user comments into the configuration as suggested by Fuller above.

Regarding claims 80 and 93, the method claim 74, wherein said identifier is a file name (34:10 – 25).

Regarding claims 81 and 94, the method claim 74, wherein said identifier is a function name (34:10 – 25).

Regarding claims 82 and 95, the method of claim 74, wherein said identifier is a macro name (34:10 – 25, for macro see et seq, discloses NEB firmware).

Regarding claims 83 and 96, the method of claim 74, wherein said identifier is a class name (34:10 – 25).

Regarding claims 85 and 98, the method claim 74, wherein said organizational structure is a class structure (34:5 – 25).

Regarding claims 86 and 99, the method claim 74, wherein said constituent is a file (34:10 – 25, see NEB et seq).

Regarding claim 103, the system of claim 100, wherein said name comprises at least one of a file name, a function name, a macro name, a class name, and an identifier (34:10 – 25).

***Conclusion***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chuck Kendall whose telephone number is 571-272-3698. The examiner can normally be reached between Monday and Thursday, at 11:00 am - 4:300pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Dam can be reached on 571-272-3695. The fax phone number for the organization where this application or proceeding is assigned is **571-273-8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Chuck O Kendall/

Primary Examiner, Art Unit 2192